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PTO/SB/21 (09-06)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/707,384	
	Filing Date	12/09/2003	
	First Named Inventor	Cheng-Jung Chen	
	Art Unit	2629	
	Examiner Name	NGUYEN, KEVIN M	
Total Number of Pages in This Submission	8	Attorney Docket Number	VASP0003USA

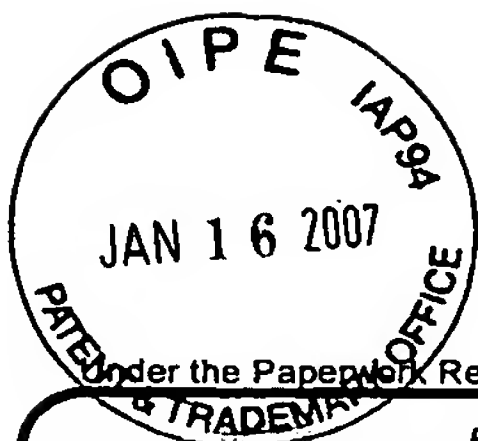
ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	1. Copy of the Front Page of Patent
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	2. Copy of Fee Transmittal submitted on 10/30/2006
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	3. Copies of the Notice of Recordation dated 12/10/2003
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	Remarks Request for Certificate of Correction of Office Mistake	
Certificate JAN 18 2007		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	North America Intellectual Property Corporation	
Signature	<i>Winston Hsu</i>	
Printed name	Winston Hsu	
Date	JAN 12 2007	Reg. No. 41,526

CERTIFICATE OF TRANSMISSION/MAILING		
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:		
Signature	<i>Stephanie Lai</i>	
Typed or printed name	Stephanie Lai	Date JAN 12 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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JAN 19 2007



PTO/SB/17 (07-06)

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005☒ Applicant claims small entity status. See 37 CFR 1.27TOTAL AMOUNT OF PAYMENT (\$)**0.00****Complete if Known**

Application Number	10/707,384
Filing Date	12/09/2003
First Named Inventor	Cheng-Jung Chen
Examiner Name	NGUYEN, KEVIN M
Art Unit	2629
Attorney Docket No.	VASP0003USA

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: **50-3105** Deposit Account Name: North America Intellectual Property Corporation

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
		Small Entity Fee (\$)		Small Entity Fee (\$)		Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims
_____ - 20 or HP = _____ x _____ = _____				
HP = highest number of total claims paid for, if greater than 20.				

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ - 3 or HP = _____ x _____ = _____			
HP = highest number of independent claims paid for, if greater than 3.			

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 = _____ / 50 _____ (round up to a whole number) x _____ = _____				

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): _____

SUBMITTED BY

Signature	<u>Winston Hsu</u>	Registration No. (Attorney/Agent)	41,526	Telephone	3027291562
Name (Print/Type)	Winston Hsu	Date	JAN 12 2007		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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JAN 19 2007

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor : Cheng-Jung Chen et al.
Examiner: NGUYEN, KEVIN M Art Unit: 2629
Patent No. : US 7,148,869 B2 Issue Date : Dec. 12, 2006
Docket No. : VASP0003USA

Title: DRIVING CIRCUIT OF A LIQUID CRYSTAL DISPLAY AND
RELATING DRIVING METHOD

To: Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

Subject: Request for Certificate of Correction of Office Mistake

The name of the assignee listed on the front page of the Patent is incorrect (Attachment 1). Documents on record indicate this as an Office mistake of consequence.

The applicant hereby requests that a Certificate of Correction be issued under 37 CFR 1.322 to correct the name of the assignee from Vestview Technology Inc. to Vastview Technology Inc. which was correctly listed on the Fee Transmittal submitted on 10/30/2006 (Attachment 2) and the Notice of Recordation dated 12/10/2003 (Attachment 3).

JAN 19 2007

Respectfully submitted,

Winston Hsu

Date: JAN 12 2007

Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

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(Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan).

JAN 19 2007

(10) **Patent No.:** US 7,148,869 B2
(45) **Date of Patent:** Dec. 12, 2006

6,100,879	A	8/2000	Da Costa	
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FOREIGN PATENT DOCUMENTS

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WO	WO-99/05567		2/1999

* cited by examiner

Primary Examiner—Richard Hjerpe
Assistant Examiner—Kevin M. Nguyen
(74) Attorney, Agent, or Firm—Winston Hsu

(57) **ABSTRACT**

A driving method of a liquid crystal display (LCD) includes (a) measuring reaction curves of LCD panel pixels switching from any gray scale value to others within a frame period and generating a standard table according to the results, (b) measuring adjustment gray scale values of any gray scale values for different gammas, (c) generating a plurality of tables according to the adjustment gray scale values and the standard table, (d) applying scan voltages to the scan lines, (e) receiving image data from an image signal terminal, (f) delaying the image data for a frame period to generate delayed image data, (g) selecting a table from the standard table and the tables according to gamma, and (h) selecting an image data value from the selected table according to the current and delayed image data to generate a data line voltage to be applied on a corresponding data line.

8 Claims, 8 Drawing Sheets

JAN 19 2007

5,729,297	A *	3/1998	Kwon	348/458
5,910,796	A	6/1999	Gormish	

Attachment >

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

027765 7590 09/27/2006

NORTH AMERICA INTELLECTUAL PROPERTY
CORPORATION
P.O. BOX 506
MERRIFIELD, VA 22116

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

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Stephanie Lal	(Depositor's name)
<i>Stephanie Lal</i>	(Signature)
10/30/2006	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,384	12/09/2003	Cheng-Jung Chen	VASP0003USA	1383

TITLE OF INVENTION: DRIVING CIRCUIT OF A LIQUID CRYSTAL DISPLAY AND RELATING DRIVING METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$700	\$300	\$0	\$1000	12/27/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, KEVIN M	2629	345-089000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,</p> <p>(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.</p>	<p>1 <u>Winston Hsu</u></p> <p>2 _____</p> <p>3 _____</p>
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE Vastview Technology Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)
4F, No. 5, Technology Rd., Science-Based Industrial Park, Hsin-Chu, Taiwan, R.O.C.

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

<p>4a. The following fee(s) are submitted:</p> <p><input checked="" type="checkbox"/> Issue Fee</p> <p><input checked="" type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number <u>50-3105</u> (enclose an extra copy of this form).</p>
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5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature *Winston Hsu* Date 10/30/2006

Typed or printed name Winston Hsu Registration No. 41,526

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Attachment 7



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Patent and Trademark Office
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OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

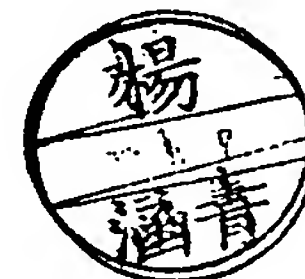


800009331A

DECEMBER 10, 2003

PTAS

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/09/2003

REEL/FRAME: 014184/0008
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CHEN, CHENG-JUNG

DOC DATE: 12/08/2003

ASSIGNOR:

SHEN, YUHREN

DOC DATE: 12/08/2003

ASSIGNOR:

CHIEN, LIANG-CHEN

DOC DATE: 12/08/2003

ASSIGNEE:

VASTVIEW TECHNOLOGY INC.

3F, NO. 8, HSIN-ANN RD., SCIENCE-
BASED INDUSTRIAL
PARK
HSIN-CHU, TAIWAN

JAN 19 2004

014184/0008 PAGE 2

SERIAL NUMBER: 10707384
PATENT NUMBER:

FILING DATE:
ISSUE DATE:

JOANN STEWART, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

JAN 19 2011